

Purdue Univ. Pharm.
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1900/01

BULLETIN

OF

PURDUE UNIVERSITY.

VOL. 1.

MAY, 1901.

No. 6.

ANNOUNCEMENT OF COURSES

IN THE

SCHOOL OF PHARMACY.

1901-1902.

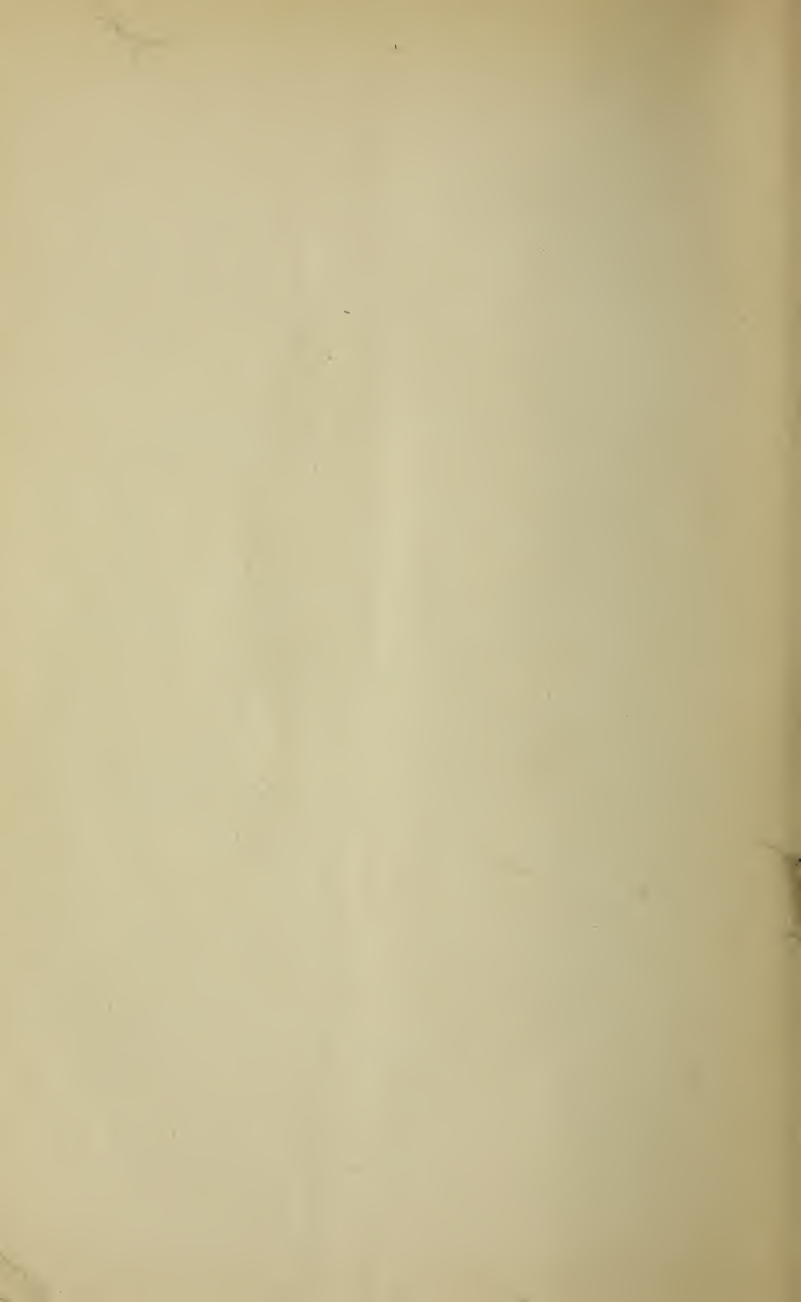
AND

CATALOGUE OF STUDENTS.

1900-1901.

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IN OCTOBER, NOVEMBER, FEBRUARY, MARCH APRIL AND MAY.
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1900-1



PURDUE UNIVERSITY

EIGHTEENTH ANNUAL ANNOUNCEMENT

OF THE

School of Pharmacy

1901-1902

INDIANAPOLIS:

Wm. B. Burford, Contractor for State Printing and Binding.

1901.

BOARD OF TRUSTEES.

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CALENDAR 1901-1902.

1901.

Entrance examination ... Tuesday, September 10, 9 A. M.
First term begins Wednesday, September 11, 10:15 A. M.
Thanksgiving, holiday... Thursday, November 28.
First term ends..... Friday, December 20, 12 M.

1902.

Examination of delinquents.... Saturday, January 4, 9 A. M.
Second term begins Monday, January 6, 10:15 A. M.
Final examination..... Thursday, March 27, 8:15 A. M.
Second term ends..... Friday, March 28, 4:30 P. M.
Third term begins Monday, March 31, 8:15 A. M.
Course I ends..... Wednesday, April 2.
Third term ends..... Tuesday, June 10, 12 M.
Commencement..... Wednesday, June 11.

* Deceased March 13, 1901.

SCHOOL OF PHARMACY.

FACULTY.*

WINTHROP ELLSWORTH STONE, PH. D.,
President of the University.

ARTHUR L. GREEN, PH. C., PH. D.,
Dean and Professor of Chemistry.

STANLEY COULTER, PH. D.,
Professor of Biology.

JULIUS W. STURMER, PH. G.,
Professor of Pharmacy.

GEORGE SPITZER, PH. G.,
Lecturer on Operative Pharmacy.

BENJAMIN M. HOAK, PH. G.,
Instructor in Materia Medica and Biology.

† CHARLES E. VANDERKLEED, PH. C., B. S.,
Assistant in Chemistry.

*Instructors in Course I.

†Resigned April 1, 1901.

SPECIAL LECTURERS.

In addition to the regular members of the faculty the following named special lecturers have assisted in certain instruction:

Electro-Therapeutics—

DR. JAMES D. HILLIS, LaFayette, Ind.

Pharmaceutical Jurisprudence—

CHARLES M. BRIGHT, LaFayette, Ind.

Different Commercial Topics—

AUGUST J. DETZER, Traveling Salesman for the Indianapolis Drug Company.

CHARLES DOWNING, Traveling Salesman for A. Kiefer & Co., Indianapolis.

LOUIS H. SCHULMEYER, Chemist for Daniel Stewart, Indianapolis.

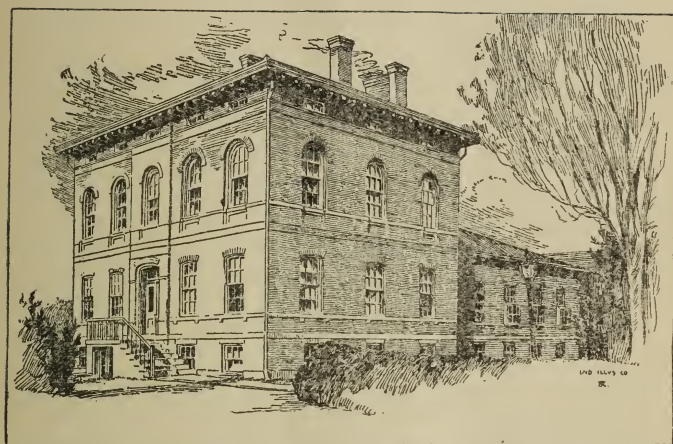
JOHN S. WRIGHT, Botanist for Eli Lilly & Co., Indianapolis.

LEO ELIEL, Pharmacist, South Bend, Ind.

EXAMINERS FROM THE INDIANA PHARMACEUTICAL ASSOCIATION.

LEO ELIEL, South Bend.

W. C. BUNTIN, Terre Haute.



PHARMACEUTICAL LABORATORY.

GENERAL STATEMENT.

PURDUE UNIVERSITY is the State Institute of Technology. It derives its name, through legislative enactment, from John Purdue, who gave to the State for the use of the institution one hundred and fifty thousand dollars. It has also received other gifts from individuals and from Tippecanoe County to the amount of three hundred and twenty-five thousand dollars.

It has an endowment fund of three hundred and forty thousand dollars, received from the general government, and is further supported by legislative appropriations and by the proceeds of annuities granted by the general government.

Its non-productive plant is valued at six hundred and fifty-five thousand dollars. This includes one hundred and ninety acres of land, twenty buildings, and a most extensive equipment, including laboratories, shops, museums, library, and reading rooms.

The institution embraces six schools: Mechanical Engineering, Civil Engineering, Electrical Engineering, Agriculture, Science, and Pharmacy.

The School of Pharmacy offers excellent training for those who expect to engage in dispensing

pharmacy, and for those who desire to enter the laboratory of a manufacturing pharmacist. The instruction also constitutes a good preparatory course for those who anticipate attending a school of medicine.

Students in Course I are engaged at the University about six hours each day. About two-thirds of this time is devoted to laboratory work, and one-third to lectures and recitations. There are neither lectures, recitations nor quizzes in the evening, that time being allotted to home study and to preparation for the ensuing day's work. The student has, therefore, no time for clerking in a drug store, and must devote his undivided time and energy to his school work.

A complete catalogue of the University will be sent on application.

All correspondence relating to the School of Pharmacy should be addressed to ARTHUR L. GREEN, DEAN, LAFAYETTE, INDIANA.

SPECIAL STATEMENT REGARDING THE PHARMACY LAW.

An act of the Legislature of 1899 requires all druggists in Indiana to obtain a license. In order to secure such license the applicant must (1) pass an examination—(2) according to the grade of license sought, must have had either two or four years' experience in a drug store or pharmacy.

Section 3 of this Act provides further that,

“In the case of an applicant for license as a Registered Pharmacist or as a Registered Assistant Pharmacist, who is a graduate of a school of pharmacy of such standing and requirements as are satisfactory to the Board of Pharmacy, the actual time spent in attendance at such school, shall be accepted as an equivalent for a term of service of equal length in a store or pharmacy where physicians' prescriptions are compounded.”

The authorities of Purdue University are gratified to be able to announce that the Indiana Board of Pharmacy, at its regular meeting held July 12, 1899, had under consideration the standing and requirements of Purdue School of Pharmacy and found the same satisfactory in all respects. In accordance with this decision, it agrees, in the case of graduates of this school, to accept the time spent in attendance as an equivalent to an equal time spent in actual service in a store or pharmacy.

EQUIPMENT.

LABORATORIES.—These are properly furnished with weighing tables, supply shelves, and individual working tables for the accommodation of over 100 students.

STORES AND STORE ROOMS.—All apparatus, drugs and chemicals, used in the laboratory work described in the succeeding pages are furnished by the University; none need be supplied by the student. To expedite the issuing of drugs and chemicals there are special store rooms, as follows: One containing supplies for manufacturing chemistry and pharmacy, one for analytical chemistry, one for prescription work, and one for supplies in pharmacognosy and microscopy. The apparatus is kept in a general store room, and is furnished the student by a “storekeeper,” who is always in attendance during laboratory hours. We believe that the system employed for the distribution of supplies and apparatus to the students works the highest possible convenience. Much of the student’s time is saved thereby.

SPECIAL APPARATUS.—In addition to the apparatus already mentioned, there is the usual lecture

table apparatus for lecture experiments in chemistry and pharmacy. Also special apparatus for special work; for instance, a Laurent polariscope, a combustion furnace, a Eureka tablet machine, etc.

WEIGHING FACILITIES.—For quantitative analysis, there are 12 fine analytical balances—nine Sartorius short arm, sensitive to .0001 Gm.; two Becker's analytical balances, and one balance made by Queen & Co. The prescription room is well supplied with prescription balances, and the general laboratories with balances for less delicate weighing.

SPECIMEN CABINETS.—For the study of pharmacognosy there are cabinets of over 1,200 specimens of drugs, chemicals and preparations. These cabinets are for class work, and are known as "working cabinets." There is also the Eli Lilly & Co. reference cabinet of crude drugs (roots, barks, leaves, flowers, seeds, etc.), as they occur in the drug market. Finally a collection of rare drugs, an herbarium of medicinal plants, and a collection of minerals. For microscopic pharmacognosy, and for the detection of adulteration in drugs, there are microscopes, and appliances for section cutting, mounting and similar work.

BOOKS AND LITERATURE.—The leading pharmaceutical journals are kept on file, accessible to the student. Students also have access, under certain restrictions, to the standard reference books on

materia medica, chemistry and pharmacy. In the general library is the "Eliel Alcove," containing reference books presented to the School of Pharmacy by Mr. Leo Eliel, of South Bend, Indiana.

MEDICINAL PLANT FARM.—About one mile west of the University is situated a four-acre piece of land, donated to the School of Pharmacy by Mr. W. W. Young. This land is being used as a farm or garden for the cultivation of medicinal plants, intended for laboratory work in botany, pharmacognosy and pharmacy.

COURSES OF STUDY.

Purdue University offers two courses of study in the School of Pharmacy:

COURSE I of two years, the first year continuing thirty-seven weeks, and the second year twenty-seven weeks. This course leads to the degree of Graduate in Pharmacy.

For a description see below.

COURSE II of four years of thirty-seven weeks each, leading to the degree of Bachelor of Science in Pharmacy. See page 25.

COURSE I.

DEGREE GIVEN.

Graduate in Pharmacy.

LENGTH OF COURSE.

Two years: One of thirty-seven and one of twenty-seven weeks. The next year opens Wednesday, September, 11, 1901.

REQUIREMENTS FOR ADMISSION.

Candidates for admission must have a good knowledge of the common English branches. In arithmetic special familiarity with denominate numbers, fractions, percentage, and proportion will be required. Examination will be held Tuesday, September 10, at 9 A. M.

Those presenting satisfactory certificates of proficiency are exempt from the entrance examination. No experience in a drug store is required.

**SUBJECTS REQUIRED IN COURSE I.
FIRST YEAR.**

SUBJECTS.	No. of Hours in Lecture Room.	No. of Hours in Labora- tory.
1. <i>Pharmacy</i>	74	111
2. <i>Inorganic Qualitative Analysis</i>	74	222
3. <i>Physiology</i>	30	.....
4. <i>Therapeutics and Doses</i>	42	.....
5. <i>Pharmacognosy</i>	18	38
6. <i>Medicinal Plants</i> .....	.....	20
7. <i>General Chemistry</i>	74	111
8. <i>Quantitative Analysis</i>	37	111
9. <i>Botany</i>	8	29
Total number of hours for the year	357	642
Average per week	27	

SECOND YEAR.

10. <i>General Chemistry</i>	54	.....
11. <i>Materia Medica and Therapeutics</i>	81	.....
12. <i>Manufacturing Chemistry and Pharmacy</i> ...	81	243
13. <i>Pharmaceutical Analysis</i>	54	162
14. <i>Microscopic Analysis of Drugs</i> .....	.....	24
15. <i>Analysis of Urine</i> .....	.....	57
16. <i>Pharmacognosy</i> .....	.....	27
17. <i>Prescription Work</i>	27	81
18. <i>Final Examination</i> .....	.....	.....
Total number of hours for the year	297	594
Average per week	33	

TOTAL NUMBER OF HOURS IN COURSE I.

	In Lecture Room	In Labora- tory.	Total.
Both years (sixty-four weeks)	654	1236	1890
Average per week	10	20	30

DESCRIPTION OF THE SUBJECTS REQUIRED IN COURSE I.

FIRST YEAR.

1. *Pharmacy.*

Class Work, 74 Hours.

(a.) Lectures and recitations on systems of weight and measure, specific gravity and its practical utility; on heat, its generation, its measurement and its use in pharmacy.

There will also be lectures and recitations on the various processes and manipulations which find application in pharmaceutical practice; as, comminution, solution, filtration, evaporation, precipitation, crystallization, percolation, etc., etc. The working formulas for the manufacture of pharmaceutical preparations will be given; the various methods will be criticised and the merits and demerits of each pointed out to the student.

(b.) The official, and the important unofficial galenical preparations will be subjected to systematic study. Special attention will be given to the chemistry involved.

(c.) The composition of the more important galenical preparations and composite medicines will be studied.

(d.) A practical course in *pharmaceutical arithmetic* will be given. Calculations which find application in practical pharmacy, in manufacturing, and in analytical work, will be taught.

Laboratory Work, 111 Hours.

In the laboratory each student will make, independently, though under the personal supervision of the instructor, the following preparations:

Medicated waters.	Extracts.
Solutions.	Masses.
Syrups.	Glycerites.
Elixirs.	Confections.
Infusions.	Honeys.
Decoctions.	Powders.
Vinegars.	Oleates.
Tinctures.	Ointments.
Fluid extracts.	Cerates.
Soluble extracts.	Plasters.
Spirits.	Pills.
Mucilages.	Capsules.
Mixtures.	Troches.
Liniments.	Suppositories.
Emulsions.	

This, like all the laboratory work in the course, is obligatory; but students who have had much experience and have acquired special skill in manufacturing will be excused from part or all of the above and provided with advanced work.

2. Inorganic Qualitative Analysis.

Class Work, 74 Hours.

Rules are committed on precipitation and on solubility. These rules are of great value, not merely in analytical work, but also in prescription work, where they aid the student in the study of the incompatibilities of inorganic substances. The general processes for the detection of acids and bases are studied by the student. He is also taught to write the equation for each chemical reaction.

Laboratory Work, 222 Hours.

In the laboratory the student verifies the rules on precipitation and solubility; he becomes thoroughly familiar with the chemical behavior of the various acids and bases; he repeatedly works

through a scheme of separation and identification of the acids and bases; he then subjects individual unknowns (mixtures of chemical compounds) to a qualitative examination, and reports his results to the instructor.

3. *Physiology.*

Class Work, 30 Hours.

This subject is treated as follows: Introductory remarks on human physiology. Chemical composition of the body. The skeleton. The digestive apparatus and digestion. The circulatory apparatus and circulation. The nervous system. The muscles. The respiratory apparatus and respiration. Secretion. Excretion. The special senses. Much attention is paid to hygiene and to the diseases of the different parts of the body.

4. *Therapeutics and Doses.*

Class Work, 42 Hours.

(a.) Study is made of the different therapeutic classes of remedies.

(b.) In connection with learning the therapeutic uses of medicines, the student will learn the quantities in which these medicines are administered. A carefully prepared *dose-table* is given. In this table medicines are grouped in a manner which will enable the student to memorize them with comparative facility.

5. *Pharmacognosy.* (The Recognition of Chemicals and Drugs.)

Class and Laboratory Work, 55 Hours.

The student will be taught to identify chemicals and crude vegetable and animal drugs by physical characteristics—appearance, taste and color. He will also receive a thorough drill on

their Latin and English names, with spelling and pronunciation. History and habitat will be given whenever of practical importance.

These studies will be pursued by the class in sections, so that each student can receive the benefit of individual instruction.

6. *Medicinal Plants.*

Laboratory Work, 20 Hours.

This work consists in the study of an herbarium of medicinal plants.

7. *General Chemistry.*

(1.) Inorganic Chemistry.

Class Work, 37 Hours.

(a.) Nomenclature and Notation. Students learn thoroughly the scientific names and the symbols of the more important chemical elements, and the scientific names and chemical formulæ of various inorganic compounds, such as hydroxids, oxids, acids, salts and anhydrids.

(b.) Lectures in General Inorganic Chemistry.

Laboratory Work, 111 Hours.

Inorganic Preparations.

(2.) Organic Chemistry.

Class Work, 37 Hours.

A study is made of the classification of organic compounds, their scientific names, and their molecular and graphic formulæ.

8. *Quantitative Analysis. Introductory Work.*

Class and Laboratory Work, 148 Hours.

Lectures on the underlying principles of gravimetric and volumetric analysis with laboratory work to verify and illustrate the same. In the laboratory, the student becomes familiar with quantitative operations in determining moisture, lead, iron, and sulphuric acid, by gravimetric processes; and sulphuric acid, sodium carbonate, and ammonia, by volumetric methods.

9. *Botany.*

Class and Laboratory Work, 37 Hours.

(a.) Lectures: Treating of the embryo, germination with its conditions and phenomena, structure and functions of the parts of the plant body, assimilation, respiration, growth, irritability, movements and fertilization.

(b.) Laboratory Work: A general study of the parts of the plant, and of plant families.

SECOND YEAR.

10. *General Chemistry.*

Class Work, 54 Hours.

(a.) Inorganic Chemistry. Recitations on the chemical elements and their compounds. The order in which this part of the subject is studied is based upon the periodic system. Attention is given to the industrial and domestic uses of inorganic chemicals.

(b.) Organic Chemistry: Recitations.

(c.) Physiological Chemistry: Lectures.

11. *Materia Medica and Therapeutics.*

Class Work, 81 Hours.

Lectures and recitations. Chemical and pharmaceutical substances are studied in the following order:

- (1.) Inorganic Chemicals and Preparations.
- (2.) Organic Chemicals and Preparations.
- (3.) Vegetable Drugs and Preparations.

The drugs are classified and studied according to their active constituents: Fixed oils, alkaloids, gums, mucilaginous principles, volatile oils, resins, gum-resins, balsams, starches, sugars, acids, tannins, coloring matters, and glucosides.

- (4.) Animal Drugs and Preparations.

Beginning with the inorganic chemicals, each substance is treated as follows:

(a.) *Introductory and General.* Study is made of source, Latin and English names, chemical formula, official compounds and preparations, color, form, odor, taste, solubility and preservation.

(b.) *Therapeutics.* Medical action and use, antidote and dose.

12. *Manufacturing Chemistry and Pharmacy.*

Class Work, 81 Hours.

Lectures and recitations on processes of preparation, impurities, and adulteration of chemical and pharmaceutical substances, which are studied in the following order:

- (1.) Inorganic Chemicals and Preparations.
- (2.) Organic Chemicals and Preparations.
- (3.) Vegetable Drugs and Preparations.
- (4.) Animal Drugs and Preparations.

Laboratory Work, 243 Hours.

Each student will make the following:

(a.) Inorganic Preparations. Crystallized sodium carbonate (from soda ash), sodium benzoate, sodium iodide, sodium bro-

mide, sodium hydrate, sodium sulphite, sodium phosphate, sodium chlorate, sulphurated potassa, potassium acetate, copper sulphate, silver nitrate (from alloy), magnesium carbonate (light), magnesium carbonate (heavy), precipitated calcium phosphate, zinc chloride, yellow mercurous iodide, red mercuric iodide, yellow mercuric oxide, red mercuric oxide, mercuric chloride, mercurous chloride, mercuric subsulphate, glycerite of boroglycerin, nitrogen monoxide, nitric acid, ammonia water, sulphurated antimony, chromic anhydride, solution of hydrogen peroxide, precipitated sulphur, sulphurous acid, hydrochloric acid, chlorine water, solution of chlorinated soda, dilute hydrobromic acid, syrup of hydriodic acid, mass of carbonate of iron, syrup of ferrous iodide. Also the following scaled salts: Ferric citrate, citrate of iron and ammonium, soluble iron and quinine citrate, iron and potassium tartrate, iron and ammonium tartrate, soluble ferric phosphate, and ferric pyrophosphate.

(b.) Organic Preparations. Methane, chloroform, iodoform, alcohol (by fermentation), absolute alcohol, ether, ethyl acetate, potassium cyanide, hydrocyanic acid, oleic acid, soap, glycerin, ethylene bromide, acetylene, benzene (by distillation from crude benzole), nitrobenzene, aniline, sodium phenol-sulphonate, picric acid, benzoic acid, salicylic acid, and artificial oil of wintergreen.

(c.) Elegant Pharmaceuticals. Elixirs, syrups, effervescent salts of the National Formulary, toilet preparations, etc.

13. Pharmaceutical Analysis. (Inorganic and Organic.)

Class Work, 54 Hours.

Lectures and recitations on qualitative tests for identity and for impurities; quantitative estimations, and pharmacopœial requirements of chemical and pharmaceutical substances, which are studied in the following order:

- (1.) Inorganic chemicals and Preparations.
- (2.) Organic Chemicals and Preparations.
- (3.) Vegetable Drugs and Preparations.
- (4.) Animal Drugs and Preparations.

The work may be further classified as follows :

(a.) Continuation of first year work in Inorganic Qualitative Analysis, with special reference to testing for impurities in inorganic chemicals, according to the U. S. Pharmacopœia.

(b.) Lectures and recitations on the Quantitative estimation of chemicals and preparations, by both gravimetric and volumetric methods. The quantitative operations of the U. S. Pharmacopœia will be given special prominence in this work.

(c.) Lectures and recitations on methods for identification of the more important organic compounds.

(d.) Lectures and recitations on methods for separation and identification of the more important inorganic and alkaloidal poisons, in the presence of other organic material, illustrating the general methods employed in *Toxicology*.

(e.) Lectures and recitations on *Pharmaceutical Assaying*, which consists in the quantitative estimation of the active constituents in crude drugs and pharmacopœial preparations. This work familiarizes the student with the various standard methods of assaying.

Laboratory Work, 162 Hours.

(a.) Separation and identification of inorganic compounds, together with the identification of impurities in chemicals that fail to fulfill the pharmacopœial requirements for purity.

(b.) Specific gravity and melting point determinations; gravimetric determinations of calcium, magnesium, phosphoric acid, etc.; volumetric determinations by saturation, precipitation, oxidation and reduction; gasometric analysis; quantitative determinations of the U. S. Pharmacopœia.

(c.) Identification of such compounds as alcohol, chloroform, glycerin, glucose, sucrose, chloral hydrate, and tannic, gallic, tartaric, benzoic, and salicylic acids.

(d.) Detection of inorganic and alkaloidal poisons, in the presence of other organic material. The student will work on poisoned food, separating and identifying the poisons.

(e.) Estimation of the active constituents of cinchona, opium, nux vomica, aconite, belledonna, guarana, ipecac, podophyllum, fluid extracts, pill masses, scale-salts; also the determination of the amount of alcohol and glycerin in galenical preparations.

14. Microscopic Analysis of Drugs.

Laboratory Work, 24 Hours.

(a.) Mounts are made of each substance examined, and also of its adulterants. These mounts are kept for comparison in working out the adulteration of any particular drug.

(b.) The following drugs are examined microscopically and chemically: Rhubarb, beeswax, lupulin, lycopodium, acacia, elm, mustard, pomegranate, gamboge, kamala, indigo, senna, tea, coffee, saffron, lactucarium. Also the spices: Pepper, capsicum, ginger, allspice, cloves, cinnamon, mace, and nutmeg.

15. Analysis of Urine.

Laboratory Work, 57 Hours.

Instruction is given on the composition of urine; on abnormal constituents and their pathological indications.

Laboratory work consists in the chemical and microscopical examination of normal and abnormal urine. The student is furnished with natural (not artificial) samples, obtained through resident physicians.

16. Pharmacognosy.

Laboratory Work, 27 Hours.

A review and continuation of the recognition of chemicals and crude drugs of the first year.

Attention is also given to the recognition of the pharmacopœial preparations.

17. *Prescription Work.*

Class Work, 27 Hours.

Lectures and recitations on the prescription, and on incompatibilities. Also a drill in Latin, with reading, interpreting, and correcting of Latin prescriptions.

Special attention is paid throughout the year to doses, solubility of chemicals, and to the composition of pharmaceutical preparations.

Laboratory Work, 81 Hours.

In the dispensing laboratory, students experiment with incompatible mixtures, thereby becoming familiar with the difficulties commonly met with at the prescription counter, and learning how best to overcome them. They fill numerous prescriptions taken from the files of drug stores, besides many typical ones furnished by the instructor.

The acquisition of manipulative skill—skill in measuring, weighing, powder folding, pill rolling, capsule filling, etc.—constitutes a prominent feature of this work.

18. *Final Examination.*

This examination is conducted by the Committee on Education of the Indiana Pharmaceutical Association and the faculty of the School of Pharmacy, and will be held Thursday, March 27, 1902. No student will be allowed to take this examination unless his previous scholarship is satisfactory.

COMMERCIAL PHARMACY.

During the school year there will be about forty-five lectures on topics pertaining to commercial pharmacy. Some of these lectures will be given by members of the faculty; others by specialists and by successful business men.

Commercial Law (ten lectures), Bookkeeping for Retail Pharmacists, How to Advertise, How to Become a Good Salesman,

The Art of Dressing Show-Windows, Photographic Supplies, Perfumes and the Perfume Trade, Paints and the Paint Trade, Sponges and the Sponge Trade, Brushes and the Brush Trade, Rubber Appliances, Surgical Instruments, Surgical Dressings, Trusses, are some of the subjects which will be given in the course in commercial pharmacy.

While the primary object of this school is to give training in scientific pharmacy, the fact that the modern pharmacist must be a business man is not lost sight of, and a special effort is made to prepare the student for a successful career.

TEXT-BOOKS.

The following text-books (latest editions) will be used:

Sturmer's Laboratory Course in Pharmacy.

U. S. Pharmacopœia.

Hoak's Dose Book.

Green's Qualitative Inorganic Chemistry.

Sadtler and Trimble's Pharmaceutical and Medical Chemistry, Vol. 1.

Sturmer and Vanderkleed's Quantitative Analysis.

Kellerman's Plant Analysis.

National Formulary.

Purdy's Urinalysis and Urinary Diagnosis.

Ruddiman's Incompatibilities in Prescriptions.

With the exception of the last three books, all are required in the first year.

EXPENSES.

The fees, which are payable in advance, are as follows:

FIRST TERM.

Entrance fee.....	\$5 00	
Incidentals.	5 00	
Chemicals	14 00	
Deposit for breakage	10 00	
Total	\$34 00	

SECOND TERM.

Incidentals.....	\$5 00
Chemicals.	14 00
Total.....	\$19 00

There are no extra charges for the third term, the fees for the entire year being \$53.00.

Good board may be had for \$2.50 a week. Furnished rooms can be had for about \$1.00 per week, when two students room together. The total expense of board, room rent, fuel, fees, books, and laundry for twenty-seven weeks need not exceed \$170, and for thirty-seven weeks need not exceed \$230. A fee of \$5.00 will be required for the diploma. Students taking Course I do not have the privilege of rooming in the dormitory.

COURSE II.

DEGREE GIVEN.

Bachelor of Science in Pharmacy.

LENGTH OF COURSE.

Four years of thirty-seven weeks each. The next year opens Wednesday, September 11, 1901.

REQUIREMENTS FOR ADMISSION.

These are stated in detail on page 153 of the general catalogue of the University. This catalogue will be furnished on application.

SUBJECTS IN COURSE II.

FRESHMAN YEAR.

Mathematics: Plane and Solid Geometry, and Higher Algebra.

Language: English Composition and Rhetoric, German and French.

English Literature:

Science: Botany and Chemistry.

Drawing: Free-hand Drawing from Model; Studies in Light and Shade.

Military Drill:

SOPHOMORE YEAR.

Mathematics: Plane and Spherical Trigonometry.

Physics: General Physics; Mechanics; Sound; Heat; Light; Electricity and Magnetism.

Chemistry: Lectures (Subject 2, page 121 and Subject 5, page 122 of the general catalogue); Laboratory practice (Subject 4, page 122 of the general catalogue).

Language: German and French.

Literature: English Poems.

Biology: Laboratory practice.

Military Drill:

JUNIOR YEAR.

Literature: English Prose Writers.

Language: German or French.

History: General History.

Inorganic Preparations: A part of Subject 7 in Course I. See page 17.

Animal Histology: One-half year, including "Microscopic Technique" and a part of "General Histology." See general catalogue, page 118.

Pharmacy: A part of Subject 1 in Course I. See page 14.

Therapeutics and Doses: The same as Subject 4 in Course I. See page 16.

Pharmacognosy: The same as Subject 5 in Course I. See page 16.

Medicinal Plants: The same as Subject 6 in Course I. See page 17.

Organic Chemistry: A part of Subject 7 in Course I. See page 17.

Quantitative Analysis: The same as Subject 8 in Course I. See page 18.

SENIOR YEAR.

Human Physiology :

Political Economy :

Materia Medica and Therapeutics : The same as Subject 11 in Course I. See page 19.

Manufacturing Chemistry and Pharmacy : The same as Subject 12 in Course I. See page 19.

Pharmaceutical Analysis : A part of Subject 13 in Course I. See page 20.

Microscopic Analysis of Drugs : The same as Subject 14 in Course I. See page 22.

Analysis of Urine : The same as Subject 15 in Course I. See page 22.

Pharmacognosy : The same as Subject 16 in Course I. See page 22.

Prescription Work : The same as Subject 17 in Course I. See page 23.

Final State Examination : The same as Subject 18 in Course I. See page 23.

Food Analysis :

Class and Laboratory Work.

Lectures on methods of food analysis and the detection of impurities and adulterations.

The student analyzes, and tests for adulteration, such foods as milk, butter, cheese, sugar, and vinegar. The sugar analysis includes polariscopic determinations.

Pharmaceutical Jurisprudence : Lectures on the legal duties and liabilities of the druggist.

Electro-Therapeutics : Lectures on the treatment of diseases by means of electricity. Practical demonstrations will also be given in the use of x-rays in surgery.

Water Analysis (Sanitary and Mineral) : Lectures on the classification and composition of natural waters, methods of analysis, and interpretation of results.

Each student will subject two samples of water to mineral analysis, and five samples of drinking water to sanitary analysis.

Bacteriology: The same as Subject 10, page 117, of the complete catalogue of the University. This subject may be chosen by the student in the place of Pharmaceutical Analysis, Food Analysis, and Water Analysis.

Thesis: As a condition of graduation, each student in this course must prepare a thesis upon some approved subject, requiring original study and investigation.

EXPENSES.

Entrance fee	\$5 00
Incidental fee, per annum.....	10 00
Laboratory and library fees, per annum—	
Freshman.....	12 00
Sophomore.....	16 00
Junior.....	20 00
Senior.....	28 00

One half of the incidental fee and one-half of the laboratory and library fee are payable at the beginning of the first term, and the remainder at the beginning of the second term.

Laboratory fees cover expenses for drawing paper, chemicals, and all other laboratory material used by students, and for the use of microscopes and other apparatus.

Students are required to make deposits for breakage and use of apparatus in chemistry and pharmacy.

Freshman, for chemistry.....	\$2 50
Sophomore, for chemistry	5 00
Junior, for pharmacy.....	5 00
Senior, for pharmacy	10 00

STUDENTS 1900-1901.

COURSE LEADING TO THE DEGREE OF GRADUATE IN PHARMACY.

FIRST YEAR.

ALPHONSE BECKER.....	Tell City.
JAMES L. BOLLER.....	Arcana.
JAMES A. BOWLES.....	Bloomington.
HERMAN BRIZIUS.....	Newberg.
GILBERT L. CORY.....	Kingman.
JAMES H. CUMMINS.....	Greenfield.
STEPHEN N. DAVIS.....	Hillsboro.
ARTHUR J. ESTABROOK.....	Sandwich, Ill.
OTTO D. FERGER.....	Indianapolis.
WILLIAM N. FITZ.....	Greenfield.
DAVID W. FOSLER.....	Richmond.
WILLIAM C. FREUND.....	Lynnville.
WILLIAM H. FULLING.....	Evansville.
SOLOMON GOLDSMITH.....	Indianapolis.
CLARENCE HALL.....	Azalia.
CHARLES U. HANNA.....	Idaville.
GEORGE H. HOLLIS.....	Jeffersonville.
ALVA W. HOPPER.....	LaFayette.
JOHN C. INLOW.....	Blue Ridge.
WILLIAM P. JOHNSON.....	Greenfield.
DANIEL M. JONES.....	Lebanon.
WILLIAM S. JONES.....	Shelbyville.
JOSEPH A. KARDES.....	Logansport.
FREDERIC C. KELLAR.....	Brazil.

LEROY B. KERLIN	Delphi.
ROBERT C. KING.....	Bloomington.
OVID B. LEWARK.....	Oxford.
ELLA B. LIVINGSTON.....	Wolcott.
RICHARD C. LIVINGSTON.....	Wolcott
HENRY LUBBERS.....	Orange City, Iowa.
GARFIELD A. LUCAS.....	Stockwell.
OTTO McCARTY	Carthage.
ALVA A. McROBERTS.....	LaFayette.
ORRA MATTHEW	Mitchell.
JOHN W. MEISER.....	Tefft.
ARTHUR B. METCALF.....	Indianapolis.
FREDERICK W. MILLER	Fort Wayne.
WADE H. MOSSMAN.....	Treaty.
JOHN L. PAULLUS.....	LaFontaine.
LAWRENCE C. RAMEY	LaFayette.
WILLIAM D. REITER	Decatur.
CHRIS M. REYHER	Garrett.
OSCAR RIEGER.....	Indianapolis.
LETA ROOT.....	Orland.
JESSE S. RUCKER.....	Greenfield.
HERMAN W. SANDER.....	Shelbyville.
ARCIENIKOS P. SCOTT.....	Hartford City.
CHARLES SHULTIS.....	Springville, Mich.
RALPH M. STORMONT.....	Princeton.
GEORGE M. STRAWN	Forrest, Ill.
JAMES H. TAYLOR	Wolcott.
HARRY L. WILT.....	Portland.

SECOND YEAR.

WILLIAM C. BARTHOLOMEW.....	Stockwell. <i>with Siler</i>
WILLIAM E. BIXLER	Cynthiana.
BENJAMIN M. BRADY	LaFayette.
BERT CARTER	Mt. Ayr.
AVERY E. DEUPREE	Edinburg. <i>with Siler</i>
RALPH E. DORLAND	Springfield, Ill.

*726 Senat Ave.
Lut - pol*

Broadlands. Cl

Alexandria Ind with McDonald + Jordan.

2, 3, 4, 5, 81

EVAN A. EVANS	.....	Eagle.	OK
JOHN FOSLER	.....	Richmond.	OK
JOHN S. GATES	.....	Muncie.	OK
JESSE M. HARDMAN	.....	River.	OK
PHILIP C. HAUS	.....	Indianapolis.	OK
ALBERT M. HOPPER	.....	LaFayette.	OK
EUGENE JALBERT	.....	Brazil.	OK
ROY M. JENNER	.....	New Albany.	1406 Edgemoor St.
JOHN G. JONES	.....	Indianapolis.	2nd med job.
ALBERT V. KIRBY	.....	LaFayette.	
HERBERT J. LEDERER	.....	South Bend.	
D. RALPH LUCAS	.....	LaFayette.	
GUY L. McCARGAR	.....	Edinburg.	OK
ALBERT M. McCLINTOCK	2, 3, 7	Newbern.	Columbus Ind
FRED MASON	.....	Terre Haute.	OK
WILLIAM C. MENAUGH	2	Salem.	OK
JAMES MONTGOMERY	.....	Brook.	OK
WILLIAM CLINTON MORRIS	.....	Frankfort.	OK
CHARLES T. PELZ	.....	Evansville.	OK
O. CAR PHILLIPS	.....	Hazleton.	OK
LEWIS W. RAGAN	.....	Waynesboro.	512 Broadway
HARRY C. RANDEL	2	Greencastle.	OK
ROBERT R. RICE	.....	Greencastle.	OK
HARRY H. RILEY	2, 3	Greensburg.	OK
WALTER L. SALMON	2, 3	Brownsburg.	OK
ALEXANDER SAVAGE	.....	Silverwood.	OK
JOHN J. SCHOENHOETZ	.....	Rhodi, Rheimpfalz, Ger.	OK
ERMEEN N. SHANK	.....	Angola.	OK
HELMER W. SMIDT	.....	Chicago, Ill.	OK
MERLE C. SMITH	.....	Osgood.	OK
HARRY SPICELY	2	Bloomington.	OK
WILLIAM E. STUCKMEYER	.....	Indianapolis.	OK
IRA L. TODD	.....	Carroll.	OK

Cor. Ind. Spec. + Vt. St. Ind. - John

JAMES T. PARLON South Raub.

HARRY WASHBURN LaFayette.

Sch. of Phys.
Ann. Lib.
39 Mich

over

Cor. Mann + Broadway

COURSE LEADING TO THE DEGREE OF BACHELOR OF SCIENCE IN PHARMACY.

SENIORS.

JOSIAH H. ANDREWS.....	Seymour.
EDWIN C. FORD. ²	New Harmony.
THOMAS L. HAYWOOD.....	LaFayette.

SUMMARY.

In course leading to Ph. G.—	
First year.....	52
Second year.....	39
Total.....	91
In course leading to B. S. in Pharmacy.—	
Seniors	3
Special	2
Total students in School of Pharmacy.....	96

ALUMNI.

With the Degree of Doctor of Pharmacy.

JOHN N. HURTY, M. D., pharmacist and analytical chemist, corner Pennsylvania and Ohio Streets, Indianapolis, Ind., President, and Professor of Chemistry and Metallurgy in Indiana Dental College; Lecturer on Hygiene in Indiana Medical College; Chemist to the Big Four Railroad; and Secretary State Board of Health.

GEORGE W. SLOAN, M. D., President of the Sloan Drug Co., 22 West Washington Street, Indianapolis, Ind., President of the American Pharmaceutical Association, 1879-1880; Lecturer on Pharmacy in Indiana Medical College; a member of the Indiana Board of Pharmacy. Residence, 604 North Meridian Street.

JOSEPH R. PERRY, M. D., pharmacist, 356 East Washington Street, Indianapolis, Ind.

With the Degree of Graduate in Pharmacy.

1886.

ERNEST G. EBERHARDT, analytical chemist for Eli Lilly & Co., Indianapolis, Ind. Address, 116 North Arsenal Avenue.

MANUAL JAY, physician, Gunnison, Colo.

JOHN KENNEDY, at one time President of the Indiana Pharmaceutical Association, deceased.

EDWIN J. MOWRY, pharmacist, Columbia City, Ind.

LOUIS H. SCHULMEYER, chemist for Daniel Stewart Co., wholesale druggists, Indianapolis. Address, 725 Capitol Avenue, N.

BERT D. WESTENFELDER, chemist to the American Oak Leather Co., Cincinnati, Ohio. Address, 247½ Clinton Street.

EMORY J. YEAGER, pharmacist, in the firm of Wells, Yeager & Best Co., LaFayette, Ind.

1887.

MILLARD CALDWELL, cigars and tobacco, 118 Jefferson Street, Hartford City, Ind.

WILLIAM H. DICKINSON, manufacturing chemist, with The Abbott Alkaloidal Co., 1416 East Ravenswood Park, Chicago, Ill.

CHARLES L. HACKETT, pharmacist in the firm of John Hackett & Son, Roanoke, Ind.

WILLIAM M. ROSS, pharmacist, Dickey, N. Dak.

ALBERT W. SHOUP, physician.

Shelbyville N.C.
1888.

PETER H. FETTERS, farmer, Goshen, Ind.

SAMUEL KENNEDY, physician, ex-vice-president State Medical Society, ex-president of the Mitchell District Medical Society, member of the United States Pharmacopœial Convention 1900, Shelbyville, Ind.

GEORGE C. MORRISON, pharmacist, Virginia Avenue and South Street, Indianapolis, Ind.

WILLIAM H. STUDLEY, business manager and pharmacist to the Private Sanitarium, 1370 Humboldt Avenue, Milwaukee, Wis.

WILLIAM H. VAWTER, pharmacist, in the Vawter-Boggs Drug Co., LaFayette, Ind.

ADEN L. CAVINS, pharmacist, Bloomfield, Ind.

HENRY H. HARRIS.

LUTHER J. HORD, pharmacist, Ponca City, Oklahoma.

MERIT POST, with the American Posting Service, 280 E. Madison Street. Residence, 390 Michigan Avenue, Chicago, Ill.

CHARLES W. SHAFER, pharmacist, Mentone, Ind.

GEORGE SPITZER, Lecturer on Operative Pharmacy, Purdue University, LaFayette, Ind.

CORTICE M. WARNER, pharmacist, 149 S. Illinois Street, Indianapolis, Ind.

DON CARLTON WHITEHEAD, pharmacist, Monclova, Ohio.

1890.

to here
 ROBERT W. ALLEN, pharmacist, 1788 W. Chicago Avenue, Chicago, Ill. 2

ELDEN BEAZLEY, pharmacist, Union, Ind.

MOSES T. BOGGS, B. S., pharmacist, in the Vawter-Boggs Drug Co., LaFayette, Ind.

BERT CRITZ, 2 *Marion Ind*

JOHN E. DUNLAVY, Greencastle, Ind.

WILLIAM E. EASTERDAY, prescription clerk at Some's Pharmacy, northeast corner Sixth and Ohio Streets, Terre Haute, Ind.

JOSEPH L. FEIBLEMAN, 2 *traveling salesman, with Des Moines Drug Co., Des Moines, Iowa. Address, 419 East New York Street, Indianapolis, Ind.*

GEORGE W. LACEY. 1

ALVIN H. LEESER, pharmacist, 1482 North Clark Street, corner Oakdale Avenue, Chicago, Ill.

HENRY W. MEINZEN, pharmacist, corner Chute and Maumee Avenue, Fort Wayne, Ind.

FRANK RIGGS, pharmacist, in the Frank Riggs Drug Co., Marion Ind. 2 3

FRANK E. SHATTUCK, traveling salesman, with Charles Leich & Co., Evansville, Ind. Address, Princeton, Ky.

MARION A. STOUT, pharmacist, Bluffton, Ind.

CHARLES W. WATKINS, 2 *pharmacist, at the Eichrodt Pharmacy, Illinois Street, Indianapolis, Ind.*

JOHN M. WESTFALL, pharmacist, Laclede and Compton Avenues, St. Louis, Mo. *Leffingwell Ave + Morgan St*

1891.

JOSEPH H. ANDERSON, pharmacist, Hull, Iowa.

JONATHAN M. BAUER, pharmacist, Payne Avenue, corner Huntington Street, Cleveland, Ohio.

ISAAC D. BONNETT, pharmacist, in the firm of I. D. Bonnett & Co., 231 S. Market Street, Shreve, Ohio.

PAUL D. BROWN, prescription clerk, with H. E. Glick, LaFayette, Ind. *care A Kiefer & Co Indianapolis.*

CHARLES C. CRAMPTON, physician, Delphi, Ind.

AUGUST DIEHL, pharmacist, 1233 North 14th Street, LaFayette, Ind.

WILLIAM S. GREEN, pharmacist, Central City, Colo.

WILLIAM J. HART, deceased.

ALVIN L. HILLS.

JAMES W. KYLE.

JOSEPH O. McCARTY, deceased.

JOHN S. MAX.

OSCAR A. MEANS, pharmacist, in the firm of Champion & Means, 400 Broadway, Logansport, Ind.

GEORGE C. METZGER, deceased.

LOUIS W. PLOGSTERTH, prescription clerk, with S. Mühl, 2135 N. Illinois Street, Indianapolis, Ind. Residence, 519 Davidson Street.

FRED P. PYKE, pharmacist, Anderson, Ind.

WILDEY F. REYNOLDS, pharmacist, corner of 10th and West Streets, Indianapolis, Ind.

DAVID L. RIFE, manager of pharmacy, 1502 E. Washington Street, Indianapolis, Ind.

HARRY E. SHARRER, physician, Hammond, Ind.

JAMES R. SPIVEY, prescription clerk, with O. C. Deam, Bluffton, Ind.

FRANK O. STABLER, deceased.

JULIUS W. STURMER, Professor of Pharmacy, Purdue University, LaFayette, Ind.

1892.

JOSEPH D. BARTLETT, pharmacist in the firm of Bartlett & Co., LaFayette, Ind.

FRANK M. BEST, pharmacist in the firm of Wells, Yeager & Best Co., LaFayette, Ind.

JOHN BRIGHT, pharmacist, corner Butler and Hoffman Streets, Saugatuck, Mich.

AMANDA H. COOKING, traveling saleswoman, with Eli Lilly & Co., Indianapolis, Ind.

See voas let 98

See Hardman 93

Massman

page the trace of. Teller 22

~~Mr. W. H. Cavins~~

see A. L. Cavins

2
FRANK CAVINS, prescription clerk, with A. L. Cavins, Bloomfield, Ind.

~~JOSEPH B. CRAMPTON, dentist, Ind.~~

2
GEORGE E. CRAVENS, pharmacist, Bloomfield, Ind.

JAMES F. FISKE, prescription clerk, with W. R. Dickinson, corner Main and Bleeker Streets, Lead, S. Dak.

NATHAN K. GARHART, president of the Garhart Dental Mfg. Co., Indianapolis, Ind.

L. EDWARD GREEN, prescription clerk, with Trunk Bros., 16th and Tremont Streets, Denver, Colo. *Leonesville Ind*

2
FRANK GRIFFITH, pharmacist, Huntington, Ind.

NINA B. HART, Boonville, Ind.

BENJAMIN M. HOAK, Instructor in Materia Medica and Biology, Purdue University, LaFayette, Ind.

EDWARD KADEL, manufacturing pharmacist, with Cook, Bell & Black, Terre Haute, Ind.

JOHN W. McMAHAN, physician, Earl Park, Ind.

2
JOHN H. MILLER, prescription clerk, with R. G. Moore, Vincennes, Ind. *23*

JOHN ROSCOE MUTZ, pharmacist, in the firm of Mutz & Lynch, Edinburg, Ind.

EMIL REYER, chemist and superintendent of the drug department of the American Malt Cream and Drug Co., South Bend, Ind. *23*

GEORGE B. SLOAN, secretary and treasurer Sloan Drug Co., 22 West Washington Street, Indianapolis, Ind.

~~FRANK M. THORN, deceased.~~

2
THOMAS A. WEST, pharmacist, in the firm of Ott & West, Rockville, Ind. *3.13.1704*

2, 3, 4 1893.

GEORGE W. BATES, pharmacist, in the firm of Moore & Bates, Palmyra, Mo.

~~JAMES BRADEN, deceased.~~

JOSEPH E. CARSON, pharmacist, in the firm of J. E. Carson & Co., West LaFayette, Ind.

JOHN C. CLARK, pharmacist, 648 East Washington Street, Indianapolis, Ind.

ROWLAND E. CLARK, pharmacist, 4 W. Market Street, Wabash, Ind.

JOSEPH L. CRAMER, pharmacist, Covington, Ohio.

MAYNARD M. ERB, salesman for the Pepsin Syrup Co., Monticello, Ill. Address Connersville, Ind.

J. R. FRANCIS, secretary and treasurer of the J. N. Hurty Pharmacy Co., Indianapolis, Ind.

WALTER L. GERHART, 939 Ohio Street, Lincoln, Neb.

WALTER E. HARDMAN, physician, Lagro, Ind.

ISAAC M. HENDERSON, pharmacist, with the Mount Sinai Hospital, New York City.

GUS HESS, deceased.

JUSTUS C. HOUSER, Ph. C., pharmacist in the Houser Drug Co., director of the Massachusetts Medicine Co.'s laboratory, Elvins, Mo.

JACOB A. LONG, manager of Oak Pharmacy, 422 Clark Street, Chicago, Ill.

MYRTLE L. McMAHAN.

LOREN B. MILLER, deceased.

HENRY H. NEAL, deceased.

JOHN H. ROCKWOOD, pharmacist, Sedalia, Ind.

JAMES H. WELLINGTON, prescription clerk with R. G. Rutherford, 180 Myrtle Avenue, Brooklyn, N. Y.

WOOD WILES, pharmacist, Bloomington, Ind.

LEONARD D. WORDEN, merchant, Albion, Ind.

1894.

CHRISTIAN H. ALBERSMEYER, pharmacist, 92 Wells Street, Fort Wayne, Ind.

WILLIAM N. ARNETT, prescription clerk, with Sloan Drug Co., 22 W. Washington Street, Indianapolis, Ind.

FRANK R. BASS, pharmacist, in the firm of G. W. Bass & Son, Martinsville, Ind.

HARRY T. S. BEST, prescription clerk, with J. W. Angde, 408 Central Avenue, Hot Springs, Ark.

DALLY BLAND, ²in charge of laboratory, with T. P. Marshall, Macon, Ga.

FRANK J. BOATMAN, pharmacist, 16th and Montcalm Streets, Indianapolis, Ind. Residence, 525 N. New Jersey Street.

HARVEY A. BURKEE, ²in the firm of the Elliott Varnish Co., Philadelphia, Pa.

ALEXANDER M. CARTER.

GEORGE A. CLAPESATTLE, pharmacist, in the firm of Clapesattle & Felts, 512 Broadway, Fort Wayne, Ind.

GEORGE C. CULLOM, pharmacist, in the firm of Ashman & Cul-
lom, Frankfort, Ind.

EDWIN C. DOWNEY, attorney, Churubusco, Ind.

OLIVER E. DUNN, pharmacist, Spencer, Ind.

FREDERICK H. FLAUGHER, prescription clerk, with Bowles Bros.,
Bloomington, Ind. Residence, 509 South Lincoln Street.

MABEL E. FLEMING, ²prescription clerk, with Joseph T. Fleming,
Princeton, Ind.

WILLIS H. FOX, ²prescription clerk, with C. A. Fellows, Three
Rivers, Mich. Residence, 511 East Street.

OTTO F. GRAHL, ²in the city department of the Fort Wayne Drug
Co., Fort Wayne, Ind. *See Burkee 96-*

NORRIS H. HARDING, stock raiser, Osgood, Ind.

GEO. W. C. HAINES, ²pharmacist, Clarks Hill, Ind.

LEONIDAS C. HINCHMAN, prescription clerk, with Thomas Hol-
lenbeck, Delaware and Market Streets, Indianapolis, Ind.

HARRY C. JAMES, prescription clerk, with the Hogan-Johnson
Drug Co., LaFayette, Ind.

ORLEY EVERT KENNON, ²prescription clerk, with A. C. Carver,
Winchester, Ind. Residence, 74 West Washington.

J. DILLON KING, pharmacist, in the firm of J. D. King & Co.,
Thirteenth and Main Streets, Terre Haute, Ind.

WILLIAM F. KIRKHOFF, prescription clerk, with A. W. Clark,
801 Santa Fe Avenue, Denver, Colo.

- JOHN H. KNEALE, pharmacist, in the firm of Kneale & Kneale, Brookston, Ind. *2*
- CHARLES O. MAPLE, pharmacist, Bloomington, Ind.
- AMOS M. MARSH, prescription clerk, with S. Felt, 12 Court Street, Watertown, N. Y.
- THOMAS P. MARSHALL, pharmacist, corner Second and Hawthorn Streets; also corner Cotton Avenue and Plum Street, Macon, Ga. *2 3 4 - 21st*
- HENRY M. MEHLIG, physician, in the firm of Vincent & Mehlig Sanitarium, Jacksonville, Fla.
- PERRY M. MURPHY, pharmacist, in the firm of DeHority & Murphy, Elwood, Ind.
- GUSTAVUS A. PETERSDORF, physician, and assistant in chemistry at the Medical College of Indiana, 1103 S. East Street, Indianapolis, Ind.
- CONRAD SCHROEDER, pharmacist, in the firm of Ensminger & Schroeder, Shelbyville, Ind.
- OLIVER W. STEPHENSON, pharmacist, Orleans, Ind. *2*
- FREDERICK A. STOKES, physician, Fourth and Ohio Streets, Terre Haute, Ind.
- GEORGE H. STOTLER, prescription clerk, with Edward Ferger, Bates House Pharmacy, Indianapolis, Ind.
- EDWARD C. TINSLEY, *2* physician, lecturer on Physiological Chemistry and Pharmacology in Central College of Physicians and Surgeons. Address, 1603 Columbia Avenue, Indianapolis, Ind. Residence, 1646 Cornell Avenue.
- ALVA I. ULRICH, pharmacist, in the firm of Briggs & Ulrich, Kalamazoo, Mich.

1895.

- FRANK W. ARTHUR, prescription clerk, with Dr. A. Myers & Co., 231 High Street, Hamilton, Ohio.
- ARRY BALDWIN, prescription clerk, with F. H. Hubbard, Noblesville, Ind.
- HENRY L. BEERMAN, 801 S. New Jersey Street, Indianapolis, Ind.

2

ARTHUR BEUKE, manufacturing pharmacist, with The Fort Wayne Drug Co., wholesale druggists, Fort Wayne, Ind.

RUDOLPH P. BISCHOFF, ²prescription clerk, with Meyer Bros. & Co., Fort Wayne, Ind.

WALTER W. BRIGGS, pharmacist, in the firm of Briggs & Ulrich, Kalamazoo, Mich.

JAMES D. BROWN, pharmacist, Barnettsville, Ind.

ARTHUR B. CARR, pharmacist, Alabama and Nineteenth Streets, Indianapolis, Ind.

CHARLES CHAVIS, manufacturing pharmacist, with Moroney Medicine Co., 2538 West Michigan Street, Indianapolis, Ind.

CASSIUS E. ELLIOTT, ²pharmacist, Sheridan, Ind.

EDWARD FERGER, pharmacist, Bates House Pharmacy, Indianapolis, Ind.

GEORGE L. GARVER, ²Connersville, Ind.

HELENA K. GRAY (Mrs. A. R. DeCosta), physician, Woodson, Ill.

EDWARD H. JACKSON, pharmacist, in the firm of Wilson & Jackson, Long Beach, Cal.

WILLIAM C. JONAS, pharmacist, Mt. Carmel, Ind.

JOHN H. KAPPEL, ²pharmacist, 58 W. Main Street, Fort Wayne, Ind. Residence, 349 E. Lewis Street.

CORYDON M. KNOWLTON, ²pharmacist, 823 Kansas Avenue, Topeka, Kas.

MARTIN J. MAUCH, ²prescription clerk, with Ashman & Cullom, Frankfort, Ind.

JOHN L. MCCLUNG, prescription clerk, with Dawson & Richter, Rochester, Ind.

BERT L. MCDILL, with the A. Kiefer Drug Co., wholesale druggists, Indianapolis, Ind. Residence, 215 E. 10th Street.

CLAY F. MEEK. *Ind. Huel*

HUBERT O. MOORE, manager Guass Pharmacal Co., 1202 E. 10th Street, Indianapolis, Ind. *Gene Hunter*
Burtin Dm
Dec.

HARRY C. NEWLAND, cashier Peabody Hotel, Memphis, Tenn.

GEORGE ORF, prescription clerk, with F. A. H. Roesener & Co., Delaware and McCarty Streets, Indianapolis, Ind.

- SAMUEL R. PENSE, pharmacist, Rossville, Ind.
 CHARLES W. REHLING, pharmacist, Barr and Washington
 Streets, Fort Wayne, Ind.
 ERNEST A. RICHEY, manufacturer of fire extinguishers, 4618 In-
 dian Avenue, Chicago, Ill.
 REASON D. SANDERS, prescription clerk, with A. B. Carr, Ala-
 bama and 19th Streets, Indianapolis, Ind.
 WILLIAM I. SCOTT, physician and pharmacist, Kokomo, Ind.
 WILLIAM J. SNODDY, pharmacist, West LaFayette, Ind.
 BENJAMIN B. TAYLOR, deceased.
 JOHN F. THORNTON, dispensing pharmacist, at Eastern Indiana
 Hospital for Insane, Richmond, Ind.
 AGNES E. UHL, M. D., deceased.
 CHARLES E. VANDERKLEED, analytical chemist, with Sharp &
 Dohme, Baltimore, Md.
 WILLIAM M. WORSHAM, prescription clerk, with A. M. Andrews,
 Connorsville, Ind.

1896.

- JOHN W. ALMOND, Ph. C., in the Almond Chemical Co., San
 Antonio, Texas.
 WILLIAM R. BANNON, Ph. C. 206 Daugherty, Sh.
 HARRY A. BIRK, Ph. C., prescription clerk, with Birk's phar-
 macy, Meridian and Ohio Streets, Indianapolis, Ind.
 J. E. BLINN, prescription clerk, with M. A. Norris, Frankfort,
 Ind.
 JOSEPH A. DEMMING, pharmacist, 863 St. Clair Street, Cleveland,
 Ohio.
 FRED H. EBERSHOFF, prescription clerk, with E. M. Schnaible,
 Lafayette, Ind.
 HENRY G. FOEHL.
 H. E. FREEHAFFER, Ph. C., prescription clerk, with R. P. Milton,
 117 West Washington Street, South Bend, Ind.
 JOHN P. FRITZ, Ph. C., pharmacist, 637 Virginia Avenue, In-
 dianapolis, Ind.

20

see Freehafer

Roanoke, Ind

EDWARD R. HACKETT, secretary to Governor of the National Military Home, Marion, Ind.

F. P. HOOPENGARDNER, Ossian, Ind.

HARRY C. HUNTER, prescription clerk, with J. B. Williams, North Manchester, Ind.

CHARLES E. INCO, Ph. C. prescription clerk, with John Laval & Sons, 220 Main Street, Evansville, Ind.

DAVID C. JORDAN, pharmacist, in the firm of McDonell & Jordan, Alexandria, Ind.

L. B. KING, prescription clerk, with I. N. Heims, Market and Illinois Streets, Indianapolis, Ind.

E. F. KRATZER, studying medicine at the Indiana Medical College, Indianapolis, Ind.

EDWARD L. MERTZ, Ph. C., pharmacist, in the firm of Mertz & Co., 434 Calhoun Street, Fort Wayne.

W. W. MULKEY, prescription clerk, with W. H. Brannon, Buena Vista, Ga.

A. D. McDONELL, Ph. C., pharmacist, in the firm of McDonell & Jordan, Montpelier, Ind.

C. M. McKELLIPS, Ph. C., Professor of Pharmacy, State Agricultural College, Corvallis, Ore.

J. F. REINHART, prescription clerk, with Albert Zimmerman, 2113 South Adams Street, Peoria, Ill.

CARL SCHELLER, pharmacist, 727 Main Street, Evansville, Ind.

EMIL N. SCHNAIBLE, Ph. C., pharmacist, 4th Street, LaFayette, Ind.

INEZ THOMPSON, Ph. C., Elizabethtown, Ind.

HARRY E. WEINLAND, Ph. C., prescription clerk, with F. W.

Shultz, Brazil, Ind.

1897.

EDMUND B. BARNARD, Ph. C., prescription clerk, at 201 South Halsted Street, Chicago, Ill.

HENRY M. BENTLY, Ph. C., pharmacist, Sidney, Ill.

HARRY J. BORST, pharmacist, 1138 S. Meridian Street, Indianapolis, Ind.

CHARLES B. CRISS, pharmacist, in the firm of Wooden & Criss, Gosport, Ind.

CARMI S. CUNNINGHAM, pharmacist, Goshen, Ohio.

VINCENT A. DITTOE, prescription clerk, with H. G. Sommers, Fort Wayne, Ind., 35 Calhoun Street.

FRANK E. EHLE, Ph. C., pharmacist, in the firm of Davenport & Ehle, Bluffton, Ind.

FRANK R. ELDRED, Ph. C., with the Fair Drug and Assay Supply Co., Butte, Mont. *Ligonier, Ind.*

HUGH GRIBBON, prescription clerk, with Bradley Bros., Wabash, Ind. *in 8-4 Benz. (Breckinridge Colo.)*

ADOLPH F. KLUTH, pharmacist, LaFayette, Ind.

AUGUST KOEHN, prescription clerk, with W. L. Waltemath, Lewis and Hanna Streets, Fort Wayne, Ind.

LOUIS A. KRAMER, pharmacist, Washington and Clay Streets, Fort Wayne, Ind.

HENRY J. LINDEMAN, prescription clerk, with J. N. Jones, Washington, Ind.

JOHN W. MCKENZIE, Ph. C., physician. *2nd - police of Wash. D.C.*

HARRY G. NORWOOD, prescription clerk, with Long & Etter, Lebanon Ind. Residence, 217 E. South Street. *see 2nd page*

GEORGE J. NUSSEBAUM, pharmacist, in the firm of Ranke & Nussbaum, 88 Calhoun Street, Fort Wayne, Ind.

DELPHA OREM, Bennington, Ind.

JOSEPH O. PERKINS, Greencastle, Ind. *- inquired about*

GILBERT M. PHARES, prescription clerk, with W. W. Jones, Greencastle, Ind.

OSEE A. RENAHAN, prescription clerk, with J. W. Rinard, Kokomo, Ind. *2734*

FRANK A. ROESENER, pharmacist, in the firm of F. A. Roesener Co., Delaware and McCarty Streets, Indianapolis, Ind.

OSCAR E. RUSSELL, prescription clerk, with Bradley Bros., Huntington, Ind.

ROBERT B. SPRING, manufacturing pharmacist, with Ward Bros. Drug Company, wholesale druggists, Indianapolis, Ind.

CHARLES W. STARZ, Delavan, Ill. *card*

WILL C. STURGIS, Ph. C., pharmacist at the National Military Home, Marion, Ind.

ALBERT J. THOMPSON, pharmacist, in the firm of A. J. Thompson & Co., Graham, N. C.

EARL P. WAGNER, Ph. C., traveling salesman for the Oliver Plow Works, South Bend, Ind. Residence, 824 Park Avenue.

CARL C. WEISS, Ph. C., in the laboratory of the Meyer Bros. Drug Company, St. Louis, Mo. *1222 + sent to him by mail + also to Indianapolis.*

FRED R. WIDMER, pharmacist, Dayton, Ind.

JESSE E. WILSON, prescription clerk, with L. A. Gable, Illinois and Sixteenth Streets, Indianapolis, Ind. Residence, 2210 Capitol Avenue, North.

ALBERT E. YEAGER, pharmacist, Jonesville, Ind.

1898.

THOMAS H. BATTLE, prescription clerk, with H. M. Holtzclaw, Perry, Ga.

GEORGE L. BERRY, prescription clerk, with Erdelmeyer & Son, Indianapolis, Ind.

J. L. BITTLE, Wingate.

EDGAR K. BRAZELTON, pharmacist, Smithville, Ga.

ERNEST E. BROCKMAN, Ph. C., Mt. Sterling, Ill.

DEWITT G. BROWN, Ph. C., pharmacist, in the firm of Dr. G. Brown & Son, Crescent City, Ill.

ELMER R. BURGIN, prescription clerk, with J. C. Lee, 1231 Meridian Street, Anderson, Ind.

THOMAS H. CLOSE, physician, Scottsburg, Ind.

JOHN W. CONNOR, prescription clerk, with Bert A. Drees, LaFayette, Ind. *232 not 4, 5*

EARL H. COSNER, prescription clerk, at Allen's pharmacy, Greencastle, Ind.

EDWARD L. FIESER, Rochester, Ind.

GEORGE W. HAVENS, prescription clerk, with F. B. Johnson & Co., Rushville, Ind.

FRED C. KAPPUS, prescription clerk, with E. U. Hague, 40 West Broad Street, Elyria, Ohio.

- WARREN M. KNAPP, pharmacist, in the firm of Flora & Knapp, Flora, Ind.
- WALTER S. LAWSON, prescription clerk, with J. C. Whiteford, 490 Madison Street, Chicago, Ill.
- WILLIAM J. LENTZ, prescription clerk, with Gross Pharmacy Co., Sixteenth and Lawrence Streets, Denver, Colo.
- EUGENE D. LUKE, prescription clerk, with Houseworth Bros., Elkhart, Ind. Residence, 500 Virginia Avenue.
- CHARLES R. LUSK, Bluffton, Ind.
- OTTO LIENKAEMPER, prescription clerk, with R. Schwegler, Lafayette, Ind.
- LEOPOLD A. MATTES, traveling salesman, with the Miles Medicine Co., Elkhart, Ind. Residence, 1312 South Main Street, South Bend, Ind.
- F. W. H. MEINZEN, pharmacist, 88 Walton Avenue, Fort Wayne, Ind.
- FRANKLIN W. MILLER, pharmacist, in the Miller Drug Co., 78 North Main Street, Martinsville, Ind.
- GUY B. MILLER, traveling salesman, with the Miles Medicine Co., Elkhart, Ind. Address, 403 South Street, Bluffton, Ind.
- W. H. O. MINTER, with Meidner, Bro. & Co., Philadelphia, Pa. Address, 1117 East Thirteenth Street, Indianapolis, Ind.
- JUDSON D. MOSCHELLE, Ph. C., studying medicine at the Indiana Medical College, Indianapolis, Ind. Address, 1305 Kentucky Avenue.
- SIEGMAR MÜHL, JR., prescription clerk, with S. Mühl, 949 North Illinois Street, Indianapolis, Ind.
- CLYDE MCCARTY, prescription clerk, with W. H. Furr, Flatwood, Ky.
- AUGUSTUS McMILLAN, Ph. C., with L. Berry, confectioner, LaFayette, Ind.
- CLARENCE S. PRENTISS, Ph. C., 58 Horton Avenue, Detroit, Mich.
- EDWARD L. RUDIG, pharmacist, in the firm of Perry & Rudig, North Manchester, Ind.
- J. W. MILLER SCHMITT, deceased.

FREDERICK W. STELLHORN, wholesale liquor business, Fort Wayne, Ind. Address, 117 St. Mary's Avenue.

HENRY V. VOGES, Ph. C., chemist to the Tilden Co., 1718 Olive Street, St. Louis, Mo.

FRED H. VOGT, prescription clerk, with C. W. Eichrodt, Indianapolis, Ind. Address, 209 North Noble Street.

CHARLES A. WARREN, Ph. C., pharmaceutical chemist, with Meyer & Gleim, Cleveland, Ohio. Address, 818 Superior Street.

1899.

WARREN N. BENSON, Ph. C., pharmacist, in the firm of W. S. Kerch & Co., 726 N. Senate Avenue, Indianapolis, Ind.

HALLIE J. BERNHARD, prescription clerk, with W. E. Sites, Palmyra, Mo.

WM. M. BLAIR, Ph. C., prescription clerk, with J. N. Dilley, Brazil, Ind.

ERNEST A. BROWN, prescription clerk, with Wells, Yeager & Best Co., LaFayette, Ind.

JOHN LOUIS BUTSCH, Ph. C., prescription clerk, with the Buntin Drug Co., Terre Haute, Ind. Address, 609 Ohio St.

HENRY L. BYERS, Trafalgar.

WALTER M. CARAWAY, prescription clerk, with A. C. Pilkenton, Greenfield, Ind.

KARL J. DECKER, Ph. C., traveling salesman, with The Miles Medicine Co., Elkhart, Ind. Address, Ligonier, Ind.

WM. F. DOWNS, studying medicine at Rush Medical College, Chicago, Ill.

ERNEST ELLIOTT, pharmacist, Lebanon, Ore.

JOHN A. GARRETTSON, prescription clerk, with C. J. Herber, Terre Haute, Ind.

FRED D. HERBOLD, manager, Trevorrow's Pharmacy, 445 E. Park St., Butte, Mont.

CHAUNCEY R. HITCH, prescription clerk, with H. E. Glick, LaFayette, Ind.

*Sheridan, Mont.
Dr. Herbold,*

*Butte Mont. Retorpenh +
Trafalgar.*

- CHARLES O. HOFFMAN, manager Hamiel & Johnson Pharmacy, Arcanum, Ohio.
- SHERMAN A. JOHNSON, Ph. C., studying medicine at the Indiana Medical College, Indianapolis, Ind.
- J. F. W. KANZLER, prescription clerk, with J. A. Hook, Prospect and S. East Streets, Indianapolis, Ind.
- A. H. KING, pharmacist, 1701 Commerce Avenue, Indianapolis, Ind. 2 - 3
- J. E. LEMMON, prescription clerk, with M. T. Anderson, Washington, Iowa. 2 3 4
- ELBERT B. MERRITT, Ph. C., prescription clerk, with H. L. Rous, Frankford, Ind.
- FRED A. MOORE, prescription clerk, with R. G. Moore, Vincennes, Ind. Address, 232 S. 5th Street.
- THOMAS E. MORRIS, pharmacist, in the firm of Morris & Scully, Atlanta, Ind. 2 3 4
- CHARLES J. MOUTOUX, Ph. C., pharmacist, Jasper, Ind.
- HENRY M. MUGG, studying medicine at the Indiana Medical College, Indianapolis, Ind. 4
- CHARLES W. ORR, pharmacist, in the firm of J. H. Orr, Arcadia, Ind. 2 3
- WILLIAM M. PURDY, prescription clerk, with C. I. Purkey & Son, Morocco, Ind.
- JOHN D. PHELAN, prescription clerk, with S. Mühl, Illinois and 10th Streets, Indianapolis, Ind. Address, 1630 Yandes Street. 2
- CHARLES W. SCOTT, prescription clerk, with J. M. Scott & Son, Illinois and 16th Streets, Indianapolis, Ind. 2
- JOSEPH A. SIGL, manager of the East Main Street Pharmacy, 51 E. Main Street, Fort Wayne, Ind.
- OTTO L. SNYDER, prescription clerk, with A. C. Gocke, 96 Broadway, Fort Wayne, Ind. 2 3 4
- WALTER C. STEDTFELDT, prescription clerk, with C. C. Hahn, 1187 Kentucky Avenue, Indianapolis Ind. 2
- CLEM THISTLETHWAITE, traveling salesman, with the Dr. N. C. Davis Co., Indianapolis, Ind.

CLARENCE V. WATERS, pharmacist, 106 N. Barron Street, Eaton, Ohio.

OLIVER P. WITHERS, prescription clerk, with W. S. Kerch & Co., Indianapolis, Ind.

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1900.

JACOB B. CLEM, prescription clerk, with D. S. Redelsheimer, Monroeville, Ind.

FRANK S. CROCKETT, studying medicine at the Indiana Medical College, Indianapolis, Ind.

GUY F. DAVIS, prescription clerk, with A. B. Jones, Lebanon, Ind. Residence, 504 West Washington Street.

GUS FERRER, prescription clerk, Bates House Pharmacy, Indianapolis, Ind.

AUGUST L. FLANDERMAYER, pharmacist, 1495 Pearl Street, Cleveland, Ohio.

CHARLES H. FRANZ, manager H. W. Carter Pharmacy, Indianapolis, Ind. Address, Station B.

CHARLES W. FRIEDMAN, Fort Wayne, Ind.

EDMUND A. GEYER, prescription clerk, with Charles Conley & Co., South Bend, Ind. Address, 503 West Marion Street.

JOSEPH E. HANEY, prescription clerk, with J. H. Wood, 6 S. Broadway, Peru, Ind.

CHARLES L. HOFFMAN, prescription clerk, with J. E. Carson & Co., West LaFayette, Ind.

WALTER W. JOHNSTON, prescription clerk, with J. R. Perry, 356 E. Washington Street, Indianapolis, Ind.

ROY C. MCKENNON, prescription clerk, with McKennon & Ashworth, 521 Central Avenue, Connersville, Ind.

CHARLES S. MILLER, studying medicine at Medical College, Mobile, Ala.

FRANK E. MILLER, prescription clerk, with H. H. Flandermeyer, St. Clair and Murison Streets, Cleveland, Ohio.

ALONZO M. PECKA, prescription clerk, with T. F. Hudson, Phoenix, Ariz. Residence, 1317 E. Washington Street.

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ELZA O. RINGWALT, prescription clerk, with Robert Lostetter, Irvington, Ind.

CHARLES SHROYER, prescription clerk, with J. J. Lantz, Warsaw, Ind. Address, 213 Perry Street.

CLYDE N. SMITH, prescription clerk, with J. R. Heinrich, 210 Calhoun Street, Fort Wayne, Ind.

JOHN W. TUDOR, prescription clerk, with J. A. Tudor, Homer, Ill.

PAUL E. WOLTER, prescription clerk, with R. P. Milton, South Bend, Ind.

CHRISTIAN H. YOUNG, 87 Norwood Street, Cleveland, Ohio.

With the Degree of Bachelor of Science in Pharmacy.

1898.

CHASE WOOD, manager Wood's Pharmacy, 6 S. Broadway, Peru, Ind.

1899.

CHARLES E. VANDERKLEED, analytical chemist, with Sharp & Dohme, Baltimore, Md.

EARL A. MEANS, prescription clerk, with Hogan-Johnson Drug Co., LaFayette, Ind.

1900.

ELBERT W. RAWLINGS, analytical chemist, with Dr. J. N. Hurty, Indianapolis, Ind. Address, 619 Senate Avenue, N.

WILBUR P. WESTFALL, prescription clerk, with J. D. Bartlett, LaFayette, Ind.

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